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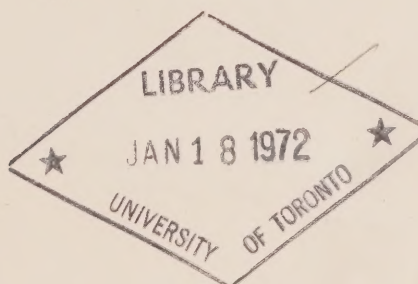
ANALYTICAL AND TECHNICAL MEMORANDA
OF THE CENSUS DIVISION, 1969-1970

An Annotated Listing of Nos. 1 - 6

by

Herman G. Beyer

Research Sub-Division



WORKING PAPER (General Series) No. 2

Ottawa, June 1971

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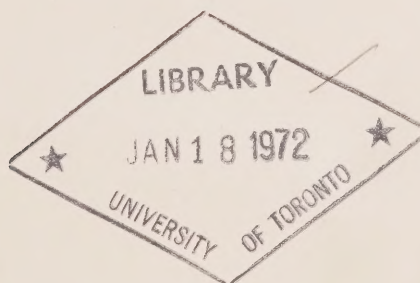
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ANALYTICAL AND TECHNICAL MEMORANDA OF THE CENSUS DIVISION, 1969-1970

An Annotated Listing of Nos. 1 - 6

1. Introduction

The purpose of this Working Paper is to provide the reader with a general overview of the scope and of the contents of the Analytical and Technical Memoranda issued in 1969 and 1970, and to enable the user of this list to decide what specific publication may serve his needs bearing in mind that the full comprehension of these memoranda requires a certain demographic and mathematical background.

Unlike the printed publications of the Dominion Bureau of Statistics which are listed in the DBS Catalogue of Publications and bear specific catalogue numbers, the memoranda annotated here are processed publications of the Census Division. As explained in "Technical Papers and Technical Memoranda Issued by the Census Division, 1965-1968", Working Paper (General Series) No. 1 by H.G. Beyer, the current series of Analytical and Technical Memoranda has replaced the previous series of Census Technical Papers.

The abstracts for memoranda No. 1-3-4 and 6 were taken from the papers themselves. Special thanks are due to Mrs. S. Tokaryk, Research Assistant in the Research Sub-Division, for preparing the abstracts for memoranda No. 2 and No. 5. Mrs. Tokaryk also prepared the citations found in Section 4.1 "Alphabetical Listing by Authors".

Copies of any of the listed issues or additional copies of this Working Paper may be obtained without cost from the Technical Coordinator (Research), Census Division, Dominion Bureau of Statistics, Ottawa, Ontario, K1A 0T7.

2. LIST OF ANALYTICAL AND TECHNICAL MEMORANDA

<u>No.</u>		<u>Abstract on page</u>
1.	Projection of Incomplete Fertility for Canada by Means of the Gompertz Function A. Romaniuk and S.M. Tanny	5
2.	The Economic Characteristics of the Young Canadian (Aged 15-24): A Profile R. Samlalsingh	5
3.	The Geographic Basis of the DBS Geocoding System for Urban Areas: An Overview R.J. Ion	6
4.	The Population Projections for Canada, 1969-84 Projections Committee	6
5.	Fertility Projections by the Cohort Method for Canada - 1969-84 A. Romaniuk	6
6.	Migration Projections for Canada, 1969-84 K.S. Gnanasekaran	7

3. ABSTRACTS OF ANALYTICAL AND TECHNICAL MEMORANDA

- | <u>No.</u> | | <u>Author</u> |
|---|---|---------------------------|
| 1. | <u>PROJECTION OF INCOMPLETE COHORT FERTILITY FOR CANADA BY MEANS OF THE GOMPERTZ FUNCTION.</u>
Ottawa: March 1969, 28 pages, 4 tables, 6 graphs. | A. Romaniuk
S.M. Tanny |
| <p>This exploratory study examines the possibility of using the Gompertz function to extrapolate the cohort fertility rates of women who are still in their child-bearing ages. The application of this method to the fertility data for the few cohorts of women with completed fertility in Canada gives encouraging results. However, the study indicates the need for improving the technique of estimating arbitrary constants involved in the Gompertz function, a goal that could be reached eventually by means of computer-oriented methods.</p> | | |
| 2. | <u>THE ECONOMIC CHARACTERISTICS OF THE YOUNG CANADIAN (AGED 15-24): A PROFILE</u>
Ottawa: January 1969, 110 pages, 73 tables. | R.S. Samlalsingh |

A first in statistical analysis of the Canadian young people, this study is concerned with influences which emerge and affect the young when causal demographic and social variables interact and interrelate with variables of work and income producing activities. Using 1961 Census population data, the author focuses on two separate age groups, 15-19 years, and 20-24 years, ranking them in relation to one another and to other sub-groups of the population with respect to pertinent variables. Placing emphasis on factual requirements relevant for policy-makers, commercial agencies and social analysts, the writer describes and analyses population size and distribution, sex and age composition, variations of the young family, and educational attainment, to show how these impinge upon such central issues as labor force status, employment rates, occupational and industry attachments, and earnings and income patterns. Probing further into interrelationships of such variables, the author identifies significant trends and differentials, thereby conveying an understanding of the performance of the young in the basic fields of economic endeavour. The study provides a base and a stimulus for further statistical research on the "Young Canadian".

- | <u>No.</u> | | <u>Author</u> |
|------------|--|--------------------------|
| 3. | <u>THE GEOGRAPHIC BASIS OF THE DBS GEOCODING SYSTEM FOR URBAN AREAS: AN OVERVIEW</u>
Ottawa: December 1969, 28 pages, 24 figures, references. | R.J. Ion |
| | <p>The geographic basis of the DBS urban geocoding system is examined with a view to underlining the importance of the system's spatial framework in the attainment of its objective; namely, special tabulation of data by 'ad hoc' user-specified areas. The study indicates that three main elements of the spatial framework - the block-face, its address ranges and its geographic co-ordinates - exert a strong influence on the system's geocoding, data storage and data retrieval stages. The author concludes that the development of any spatial information system necessitates research into the geographic elements that ultimately control system utility.</p> | |
| 4. | <u>THE POPULATION PROJECTIONS FOR CANADA 1969-84</u>
Ottawa: April 1970, 51 pages, 11 tables, 3 charts, 5 detailed tables, references. | Projections
Committee |
| | <p>This report presents four new series of population projections for Canada up to 1984. Methodologically, these series depart from the previous projections in adopting the cohort fertility method for projecting births. The projections are based on the post-censal population estimates for Canada as of June 1, 1969 and take into account recent trends and patterns in mortality, fertility, immigration and emigration. According to the four projections, the population of Canada will exceed 25 million by 1984. In the period 1969-74, the population is expected to increase at an average rate between 1.4 and 1.6 per cent a year. The projections for 1971 range from 21.5 to 21.8 million people. It is noteworthy that the young population will decline while the proportion of the adult and old people will rise in the coming years.</p> | |
| 5. | <u>FERTILITY PROJECTIONS BY THE COHORT METHOD FOR CANADA 1969-84</u>
Ottawa: November 1970, 43 pages, 11 tables, 8 charts, references. | A. Romaniuk |

Using the cohort approach instead of the period approach for projecting fertility rates in the 1969

No.

Author

5. - Concluded

DBS population projections, the author summarizes the main steps in projecting births by this method, considers conceptual differences between the two approaches, and shows specific problems that arise from peculiarities in Canadian data. Applying alternative methods such as the chain ratio, fitting the Gompertz curve, and graphical extrapolation of past cohort-parity-age-specific rates, the writer projects the final birth rates for the cohorts with incomplete fertility. The projection of final birth rates for the cohorts due to enter childbearing later in the projection period is based on time series related to parity distribution. The study, further, analyses the time series concerning nuptiality, parity distribution and childspacing, and reveals features on which to base the projection of age patterns of childbearing. Ways of associating the assumed levels of completed fertility rates with assumed age patterns of fertility to generate cohort-age-specific fertility rates are discussed. Finally some problems of reconciliation of past and projected series are raised.

6. MIGRATION PROJECTIONS FOR CANADA 1969-84.

K.S. Gnanasekaran

Ottawa: November 1970, 63 pages, 16 tables, 5 charts, 2 appendices, 7 appendix tables.

This study examines past trends, and it presents projections of immigration and emigration by age and sex up to 1984 for incorporation in the DBS population projections for Canada. Several problems, methodological and statistical, need to be solved before completing this work. The study also explores, sometimes empirically, ways of estimating the age-sex distribution of immigrants/emigrants and other data needed for the projections. As for the prospects, it is anticipated that immigration will range from 80,000 to 200,000 persons a year over the next fifteen years while emigration will be about 60,000 persons in a year. Projections based on these assumptions indicate a cumulative net additions to population of 108,000 to 749,000 in five years. This will mean an increase through migration of about one-tenth to three-fourths of 1 per cent of the total population in each year.

4. AUTHORS AND DOCUMENTATION

The following Section 4.1 has been added to avoid time-consuming search for a format for referencing. By using the citations as given (for joint authorship as shown under the senior author) a desirable standardization of documentation may be achieved.

4.1 Alphabetical Listing by Authors

Gnanasekaran, K.S. "Migration Projections for Canada, 1969-84". Analytical and Technical Memorandum No. 6. Census Division, Dominion Bureau of Statistics. Ottawa, November 1970.

Ion, R.J. "The Geographic Basis of the DBS Geocoding System for Urban Areas: An Overview". Analytical and Technical Memorandum No. 3. Census Division, Dominion Bureau of Statistics. Ottawa, December 1969.

Projections Committee. "The Population Projections for Canada, 1969-84". Analytical and Technical Memorandum No. 4. Census Division, Dominion Bureau of Statistics. Ottawa, April 1970.

Romaniuk, A. "Fertility Projections by the Cohort Method for Canada 1969-84". Analytical and Technical Memorandum No. 5. Census Division, Dominion Bureau of Statistics. Ottawa, November 1970.

_____, and Tanny, S.M. "Projection of Incomplete Fertility for Canada by means of the Gompertz Function". Analytical and Technical Memorandum No. 1. Census Division, Dominion Bureau of Statistics. Ottawa, March 1969.

Samlalsingh, R. "The Economic Characteristics of the Young Canadian (Aged 15-24): A Profile". Analytical and Technical Memorandum No. 2. Census Division, Dominion Bureau of Statistics. Ottawa, January 1969.

Tanny, S.M. See: Romaniuk, A. and Tanny, S.M.

